

Overview of the

# ***Wildland Fire Decision Support System***





# Briefing Topics

- Background and Policy
- Review the WFDSS components
- Discuss the communication strategy in place for WFDSS in BLM



# WFDSS key points

- Primary application is in fire operations
- Secondary applications (longer term):
  1. Fuels planning
  2. NEPA – evaluation of alternatives
  3. Risk quantification
- Spatial data needed from all resources to give most power to WFDSS



# Why is BLM adopting WFDSS?

- Inefficient decision making (Office of Inspector General review)
- Wildland Fire Leadership Council (BLM Director) and Fire Executive Council (Jim Douglas our rep) committed to adopt WFDSS
- WFDSS to eventually provide:
  1. Cost savings, efficiencies
  2. Latest science
  3. Policy consistency



# So, what is the WFDSS?

(Wildland Fire Decision Support System)

- WFDSS – scalable, interagency wildland fire documentation and analysis system
- Documents fire information, provides modeling, and depicts values spatially
- Applicable to all wildland fires and conforms with recent policy modifications

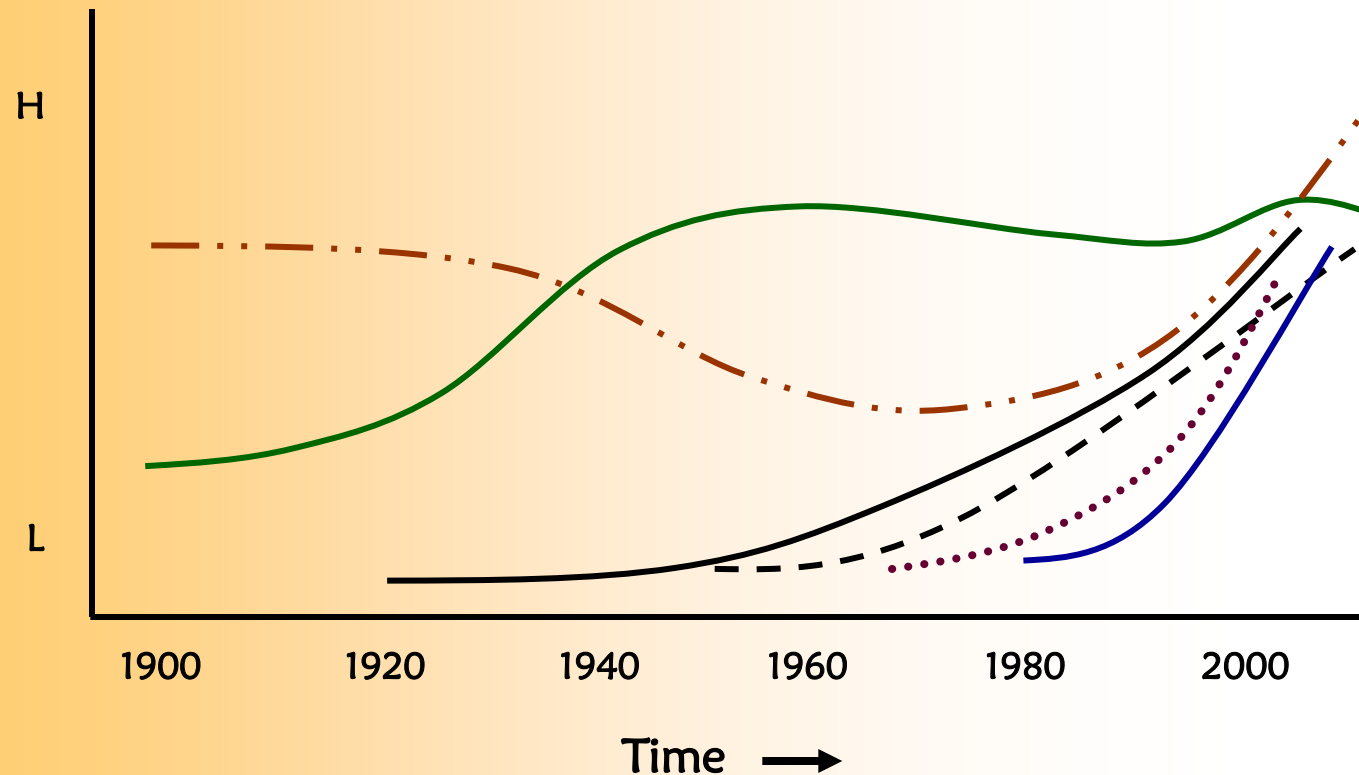


# Fire Director's Expectations

## 12/3/08

- WFDSS is decided upon
- Schedule is flexible
- Combine skills in a working group

# Wildland Fire Management – Complexity and Capability



— · — Fire Complexity

— Operational Capability

— Prescribed Fire

- - - Science and Technology

— Decision Support

..... Wildland Fire Use

# Wildland Fire Decision Making

---



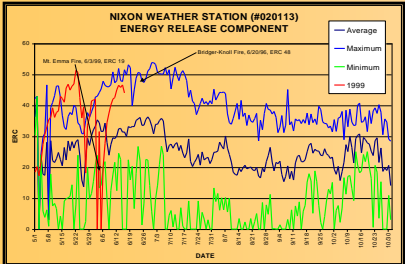
- Resource availability can no longer match large fire occurrence,
- Management of large fire costs becoming increasingly important,
- Smallest percentage of total wildland fires – large fires, accounts for largest amount of expenditures,
- Initial strategic response decisions are most important in terms of resource commitments and expenditures.



# WFDSS - Goals of Development



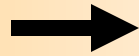
- Documents strategic decisions,
- Provides decision support,
  - utilizes appropriate fire behavior modeling, economic principles, and information technology,
- Allows for operational plan preparation,
- Is linear, scalable, and responsive to fire complexity,
- Is spatially oriented, graphically displayed, with no reliance on large text input requirements,
- Is Internet-based to provide risk and decision sharing simply and efficiently,



# Subsection Areas and Information Flow

---

Information



***Purpose:***

**Documents the initial and continuing fire situation, and provides required information to complete administrative fire reporting.**

Situation

Objectives

Course of Action

Validation

Decision Summary

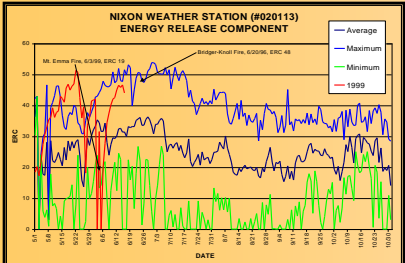
Periodic Assessment

# WFDSS – User Roles



## Eight Specific Roles Identified in WFDSS:

- Viewer
- Dispatcher – typically dispatch centers
- Author – typically FMO, DM, or agency rep.
- Geographic Area Editor
- National Editor
- Fire Behavior Analyst – Specialized skills in fire behavior (FBAN, LTAN)
- RAVAR Analyst – Quantifies values at risk
- Super Analyst



# Looking at Response Levels in WFDSS



## Information

95% of BLM fires,  
continuation of  
what we do

Land and  
Resource  
Mgmt  
Plan

Spatial Data  
Upload –  
Pre-fire  
Planning

Fire  
Management  
Plan

Characteristics  
– situation

- Incident Documentation
- Situation Documentation
- Objectives
- Course of Action
- Preplanned actions/decisions
- Reports

- Incident Documentation
- Situation Documentation
- Objectives
- Course of Action
- Decision
- Reports

- Incident Documentation
- Situation Documentation
- Objectives
- Course of Action
- Decision
- Validate Strategy
- Reports

Response  
Level 1

Response  
Level 2

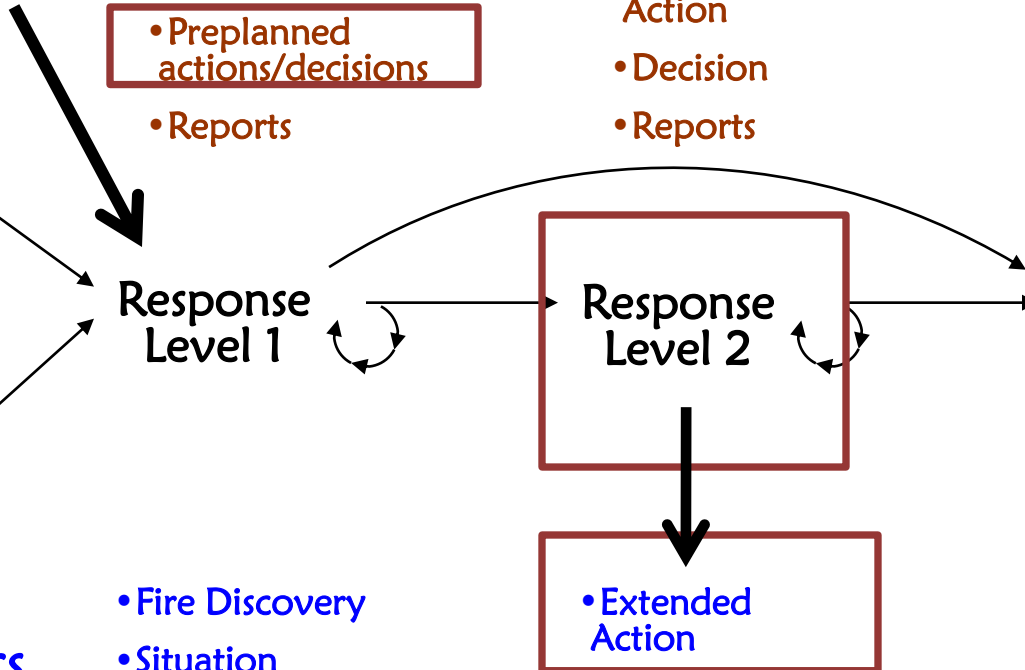
Response  
Level 3

Less than 1% of  
BLM incidents!

- Fire Discovery
- Situation Assessment and Documentation

- Extended Action
- WFIP Stage II

- Large Fire Suppression
- Long-Duration Fire





# Wildland Fire documentation options for 2009 season

- Wildland Fire Situation Analysis and associated documents
- WFDSS text version – fill in the blank template without spatial analyses
- WFDSS web-based version



# WFDSS options for 2009

- WFDSS text version – fill in the blank template without spatial analyses
- Meant to be an interim tool

# Wildland Fire Decision Support System - Text System

Unit BLM Nevada, Elko District  
Date 6/30/2009

Response Level 2

National Significance No

## INFORMATION

	RL1	RL2	RL3	
Fire Name	R	R	R	Mahogany Butte
Location	R	R	R	Latitude: 41.5993 Longitude: 116.6974
Start Date/Time	R	R	R	6/27/2009 0800
Size	R	R	R	18,804
Cause	R	R	R	Lightning
Geographic Area	R	R	R	WGB
Administrative Unit(s)	R	R	R	Elko District BLM
Involved Cooperators	R	R	R	Nevada Division of Forestry, IL Ranch
Fire Management Unit	R	R	R	FMU #6- Owyhee Desert
Fire Number	R	R	R	NV-EKD-00195
Management Code	R	R	R	DNN9

# OBJECTIVES

	RL1	RL2	RL3
<b>Strategic Objectives</b>	R	R	R
			<p>From Elko/Wells RMP:</p> <ol style="list-style-type: none"> <li>1. Maintain fire as part of the natural ecological process and to achieve desired plant communities for grazing and wildlife management.</li> <li>2. Maintain native vegetation diversity and prevent the encroachment of annual and non-native plant species.</li> <li>3. Unplanned ignitions will be managed using current guidelines for Sage Grouse and Sagebrush ecosystems</li> </ol>
<b>Relative Risk Assessment</b>	R	O	NA
			<b>See Relative Risk Assessment Chart</b>
<b>Incident Objectives</b>	R	R	R
			<p>As always, firefighter and public safety are the highest priority. Suppression actions will be conducted with this priority in mind.</p> <p>Provide for the protection of sage grouse populations and habitats by using District suppression guidelines.</p> <p>Contain fire west of Desert Ranch Reservoir, south of Owyhee Canyon WSA, east of Silver Lake, and north of 2006 Winters fire. Minimize fire impacts to private lands, and protect structures and developments.</p>
<b>Management Requirements</b>	R	R	R
			<p>Minimize impacts to sage-steppe ecosystem, and protect Sage Grouse habitat.</p> <p>Consider social, economic, and political constraints when formulating operational plans. Involve local ranchers, NDF, the Resource Advisor, and the assigned IMT Liaison in briefings and planning sessions.</p> <p>Protect high value habitat, minimize impacts to areas of exotic vegetation invasion, and protect cultural values.</p> <p>For fires occurring within or adjacent to mine facilities, cultural sites, and when fires are within or threaten a WSA, a Resource Advisor is required to be ordered for the fire.</p> <p>In addition to a Resource Advisor, a Public Information Officer, and Law Enforcement Officer may be desired on site, especially when fires are in close proximity to private lands (homes and improvements).</p> <p>Manage the incident safely, and manage incident cost in accordance with values to be protected.</p>
<b>Incident Requirements</b>	R	R	R
			<p>Mechanized equipment may be used to protect areas of high resource concerns or values; however, the use of mechanized equipment will be evaluated against potential long-term resource damage.</p> <p>Use of mechanized equipment should be limited in areas of exotic vegetation invasions and cultural sites.</p> <p>Avoid, whenever possible, burning out unburned islands of sagebrush.</p> <p>Avoid surface disturbing suppression activities in riparian and recreation areas, whenever possible.</p> <p>Application of retardant restrictions: Avoid retardant dropped within 300 feet of water sources, if possible.</p> <p>Power lines, communication sites and other critical sites within mining</p>





# WFDSS Options for 2009

- WFDSS web-based version – spatial analysis and automated features
- Eventually the sole documentation and analysis system for wildland fire mgmt.



- Home
- About WFDSS
- Training
- Data
- FAQs
- Related Resources
- Contact Us
- Sign In
- Request Production Account
- Request Training Account

**WFDSS Help Desk**  
[fire\\_help@fs.fed.us](mailto:fire_help@fs.fed.us)  
 +1 800-253-5559

## Welcome!

### Wildland Fire Decision Support System

Welcome to the Wildland Fire Decision Support System (WFDSS)!

This system is intended to assist fire managers and analysts in making strategic and tactical decisions for fire incidents. It is designed to replace the WFSA (Wildland Fire Situation Analysis), Wildland Fire Implementation Plan (WFIP), and Long-Term Implementation Plan (LTIP) processes with a single process that is easier to use, more intuitive, linear, scalable, and progressively responsive to changing fire complexity.

WFDSS was conceived as a way of integrating the various applications used to manage incidents into a single system, which streamlines the analysis and reporting processes.

WFDSS is expected to be fully operational in 2009, and when completed, will provide the following advantages over previous systems:

- Combines desktop applications for fire modeling into a web-based system for easier data acquisition.
- Provides an easy way for fire managers and analysts to accurately document their decision-making process by allowing results of analyses to be attached to the decision point and included in the final incident report.
- Provides one decision process and documentation system for all types of wildland fires.
- Is a web-based application for easier sharing of analyses and reports across all levels of the federal wildland fire organization.
- Introduces economic principles into the fire decision process.

### Latest Information

- [WFDSS Training System Now Available](#)
- [Training Webinars Scheduled](#)
- [WFDSS Replaces Other Decision Reporting Tools](#)

### Fire Related Websites

- [WFDSS Training System](#)
- [NIFC](#)
- [Fire.org](#)
- [LANDFIRE](#)
- [ROSS](#)
- [FPA](#)
- [FAMWEB](#)

[http://wfdss.usgs.gov/wfdss/WFDSS\\_Home](http://wfdss.usgs.gov/wfdss/WFDSS_Home)



# WFDSS web addresses

- Log In Site:  
[http://wfdss.usgs.gov/wfdss\\_proto/faces/jsp/login/WFDSSLogin](http://wfdss.usgs.gov/wfdss_proto/faces/jsp/login/WFDSSLogin)
- Please use production site for actual fires, and testing site for exercises and mockups



## WFDSS PRODUCTION SYSTEM

### Prototype Application - Currently Under Development

\*User Name

[Request new account](#)

\*Password

[Reset your password](#)

Sign In

For testing, training, and practicing, use the [WFDSS Training Site](#)

### WFDSS Help Desk

[fire\\_help@fs.fed.us](mailto:fire_help@fs.fed.us) 800-253-5559 / 208-387-5290

#### \*\*\*\*\* TERMS OF USE \*\*\*\*\*

Unauthorized access to this United States Government Computer System and software is prohibited by Title 18, United States Code 1030.

This statute states that: Whoever knowingly, or intentionally accesses a computer without authorization or exceeds authorized access, and by means of such conduct, obtains, alters, damages, destroys, or discloses information or prevents authorized use of (data or a computer owned by or operated for) the Government of the United States shall be punished by a fine under this title or imprisonment for not more than 10 years, or both.

All activities on this system and network may be monitored, intercepted, recorded, read, copied, or captured in any manner and disclosed in any manner by authorized personnel. THERE IS NO RIGHT OF PRIVACY ON THIS SYSTEM. System personnel may give to law enforcement officials any potential evidence of crimes found on this USDA computer system.

USE OF THIS SYSTEM BY ANY USER, AUTHORIZED OR UNAUTHORIZED, CONSTITUTES CONSENT TO THIS MONITORING, INTERCEPTION, RECORDING, READING, COPYING OR CAPTURING AND DISCLOSURE. REPORT UNAUTHORIZED USE TO AN INFORMATION SYSTEMS SECURITY OFFICER.



Incident: Elko Mahogany Fire - test

[Doug Havlina on Production](#) | [Sign out](#)

[Help](#) | [Feedback](#) 

[Home](#)

## Incidents

## Analyses

## Intelligence

## Data Management

[My Home Page](#)

### Contact Information

Password

### ◆ Privileges

## System Preferences

## Address Book

## Home - Request Privileges

Checkboxes in the first column indicate your currently assigned roles. To request changes to your access privileges:

1. Check or uncheck boxes in the first column.
2. Supply a brief justification for why you require the requested access privileges.
3. Press the "Submit Request" push button.
4. Your request will be sent to the appropriate WFDSS administrator for approval.

- User Role(s)

- ☐ Viewer
- ☐ Dispatcher
- ☒ Author
- ☐ Geographic Area Editor
- ☐ National Editor
- ☒ Fire Behavior Specialist
- ☐ RAVAR Analyst
- ☐ Super Analyst
- ☐ Data Manager
- ☐ Help Desk
- ☐ Administrator

You can select multiple roles (privileges).

Some roles imply privileges associated with other roles:

- All roles are granted Viewer privileges.
- National Editors and Geographic Area Editors are granted Author privileges.
- Super Analysts are granted Fire Behavior Specialist and RAVAR Analyst privileges.
- Help Desk supercedes all other role assignments.

\*Justification

--	--

[Submit Request](#)

## Example of requesting permissions in the WFDSS



# Data Manager

- FMO, Fire Planner, Environmental Coordinator
- Responsible for coordinating FMU and RMP planning objectives into WFDSS
- Result: objectives populate when latitude and longitude are entered



# Typical BLM fire which escapes initial attack



## Incident List Filter

## Filters

Recent Incidents

[Define Temporary Filter](#)[Define New Filter](#)

## Incident List

[Create New Incident](#) [Set Incident List Preferences](#) [Show Intelligence Map for these Incidents](#)[View Information](#)[Assess Situation](#)[View Analyses](#)[Accept](#)[Delete Incident...](#)

<input type="radio"/>	<u>Incident Name</u>	<u>Owner Name</u>	<u>Geographic Area</u>	<u>Jurisdictions</u>	<u>Acreage</u>	<u>Start Date</u>	
<input type="radio"/>	test_npf	Barrett, Laura	Northern Rockies	USFS	0.0	02/09/2009	
<input type="radio"/>	long canyon	Bennett, Jill	Northern Rockies	USFS	0.0	01/26/2009	
<input type="radio"/>	TB-NMWFRB	Buhl, Tracie	Northern Rockies	USFS	4.14	01/28/2009	
<input type="radio"/>	Test11	Campbell, Greg	Rocky Mountain	Other	11.0	01/26/2009	
<input type="radio"/>	Pinabetal	Gallegos, Delfinia Marie	Southwest	USFS	1.0	01/27/2009	
<input type="radio"/>	Test - Ag	Gelobter, Aaron	Southern California	USFS	2.0	02/11/2009	
<input type="radio"/>	Blue fire - test	Havlina, Doug	Western Great Basin	BLM	5.0	02/10/2009	
<input type="radio"/>	Elko Mahogany Fire - test	Havlina, Doug	Western Great Basin	BLM	18804.0	06/27/2009	
<input type="radio"/>	DHTest	Henson, David	Northern Rockies	Other	5.0	01/28/2009	
<input type="radio"/>	MH Test	Hovorka, Marlena	Southwest	USFS	0.0	02/11/2009	
<input type="radio"/>	Test02112009	Hovorka, Marlena	Southwest	USFS	10.0	02/11/2009	
<input type="radio"/>	test02122009	Hovorka, Marlena	Southwest	USFS	0.0	02/12/2009	
<input type="radio"/>	Kerr_anf_test	Kerr, David	Southern California	USFS	25.0	01/19/2009	
<input type="radio"/>	linfordtest	Linford, Karen	Northern Rockies	USFS	0.0	01/27/2009	





# Once incident is created....

- Series of tabs available which guide user through the decision and analysis process



Incident List
FSPRO Request
RAVAR Request
SCI Request
FMU List
Shape Upload
Incident Privileges
Incident Analyses

## Edit Incident Information

\*Incident Name

Elko Mahogany Fire - test

Geographic Area

Western Great Basin

Owner Name

Havlina, Doug

[Transfer Ownership...](#)

\*North Latitude (Decimal)

41.5993

or

Deg

41

Min

35

Sec

57

Example: 39.52

\*West Longitude (Decimal)

116.6974

or

Deg

116

Min

41

Sec

51

Example: 105.3

Fire Number

NV-EKD-00195

Fire Code

DNN9

Unit Name

Elko District BLM

Incident Size (acres)

18804.0

Incident Cause

☐ Unknown☒ Natural☐ Human

Is this a fire of National Significance?

☒ Yes☐ No

\*Incident Start Date

06/27/2009



Incident Start Time

08:00

Containment Date

07/04/2009



Containment Time

19:00

Controlled Date

07/06/2009



Controlled Time

19:00

Out Date



Out Time

[Save](#)

\*Affected Jurisdiction(s)

☐ Bureau of Indian Affairs☒ Bureau of Land Management☐ Fish and Wildlife Service☐ National Park Service☐ United States Forest Service☐ Other

Landscape Data Source

☐ AK Tanana Zone☐ AK Yukon-Charley☐ CA Landscape☒ LANDFIRE National☐ LANDFIRE Rapid Refresh



# Wildland Fire Decision Support System

National Preparedness Level: **1**Doug Havlina on Production | [Sign Out](#)

Incident: Elko Mahogany Fire - test

[Home](#) [Incidents](#) [Analyses](#) [Intelligence](#) [Data Management](#)[Help](#) | [Feedback](#)[Information](#) [Situation](#) [Objectives](#) [Courses of Action](#) [Validation](#) [Decisions](#) [Periodic Assessment](#) [Reports](#)[Menu](#) [Map](#) [Info](#)

Scale = 1 : 433K



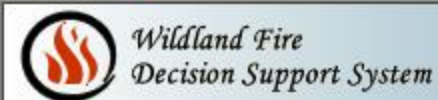
Latitude: 41.38608 Longitude: -116.19

## Layers

- ☒ Base Layers
  - ☐ WFDSS Topos
  - ☐ Google Maps
  - ☒ Google Physical
  - ☐ TerraServer Topos
- ☒ Incident
- ☐ Analyses
- ☒ Fire-Related
- ☐ Reference
- ☒ Editable







National Preparedness Level: 1

Doug Havlina on Production | [Sign Out](#)

Incident: Elko Mahogany Fire - test

 Home Incidents Analyses Intelligence Data Management[Help](#) | [Feedback](#)

Information Situation Objectives Courses of Action Validation Decisions Periodic Assessment Reports

Menu Map Info








Scale = 1 : 216K



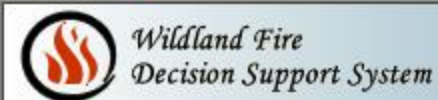
Latitude: 41.61493 Longitude: -116.38

Layers

- ☒ Base Layers
  - ☐ WFDSS Topos
  - ☒ Google Maps
  - ☐ Google Physical
  - ☐ TerraServer Topos
- ☒ Incident
  - ☐ Fire Perimeters 
  - ☐ Mahogany 
  - ☒ Fire Barriers 
  - ☒ Landscape Masks 
  - ☒ Points of Interest 
  - ☒ Extent
- ☒ Analyses
- ☒ Fire-Related
- ☒ Reference
- ☒ Editable







National Preparedness Level: 1

Incident: Elko Mahogany Fire - test

Doug Havlina on Production | [Sign Out](#)[Home](#) [Incidents](#) [Analyses](#) [Intelligence](#) [Data Management](#)[Help](#) | [Feedback](#)[Information](#) [Situation](#) [Objectives](#) [Courses of Action](#) [Validation](#) [Decisions](#) [Periodic Assessment](#) [Reports](#)[Menu](#) [Map](#) [Info](#)

Scale = 1 : 216K



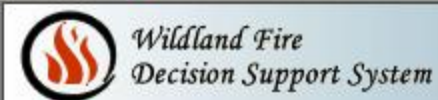
Latitude: 41.64572 Longitude: -116.44

**Layers**

- ☒ Base Layers
  - ☐ WFDSS Topos
  - ☒ Google Maps
  - ☐ Google Physical
  - ☐ TerraServer Topos
- ☒ Incident
- ☐ Analyses
- ☒ Fire-Related
- ☒ Reference
  - ☐ Cities and Highways
  - ☒ Critical Habitat
  - ☐ Designated Areas
  - ☐ Land Owners
  - ☐ Landscape Extent
  - ☐ State and County
- ☒ Editable







National Preparedness Level: 1

Incident: Elko Mahogany Fire - test

Doug Havlina on Production | Sign Out

Home Incidents Analyses Intelligence Data Management

Help | Feedback

Information Situation Objectives Courses of Action Validation Decisions Periodic Assessment Reports

Menu Map Info



Latitude: 41.64110 Longitude: -116.38

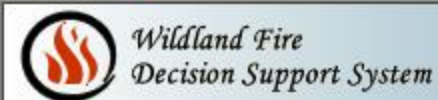
Scale = 1 : 216K

## Layers

- ☒ Base Layers
  - ☐ WFDSS Topos
  - ☒ Google Maps
  - ☐ Google Physical
  - ☐ TerraServer Topos
- ☒ Incident
  - ☒ Fire Perimeters
    - ☒ Mahogany
      - 
      - Area
      - 21,665 acres
      - Effective Date
      - 06/30/0008 17:00
  - ☐ Fire Barriers
  - ☐ Landscape Masks
  - ☐ Points of Interest
  - ☒ Extent
- ☐ Analyses
- ☒ Fire-Related
- ☒ Reference
  - ☐ Cities and Highways
  - ☒ Critical Habitat
  - ☐ Designated Areas
  - ☐ Land Owners
  - ☐ Landscape Extent







National Preparedness Level: 1

Doug Havlina on Production | [Sign Out](#)

Incident: Elko Mahogany Fire - test

[Home](#) [Incidents](#) [Analyses](#) [Intelligence](#) [Data Management](#)[Help](#) | [Feedback](#)[Information](#) [Situation](#) [Objectives](#) [Courses of Action](#) [Validation](#) [Decisions](#) [Periodic Assessment](#) [Reports](#)[Menu](#) [Map](#) [Info](#)**Layers**

- ☒ Base Layers
  - ☐ WFDSS Topos
  - ☒ Google Maps
  - ☐ Google Physical
  - ☐ TerraServer Topos
- ☒ Incident
- ☒ Analyses
  - ☒ Basic
    - ☒ Mahogany Fire
      - ☒ Flame Length
      - ☐ Fireline Intensity
      - ☐ Heat per Unit Area
      - ☐ Crown Fire Activity
      - ☐ Solar Radiation
      - ☐ 1 Hour Fuel Moisture
      - ☐ 10 Hour Fuel Moisture
    - ☐ Short Term
    - ☐ FSPro Output
  - ☒ Fire-Related
  - ☒ Reference
    - ☐ Cities and Highways
    - ☒ Critical Habitat
    - ☐ Designated Areas
    - ☐ Land Owners



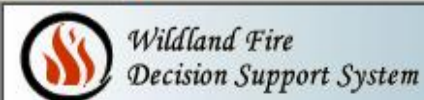
Scale = 1 : 433K



Latitude: 41.47463 Longitude: -116.13







National Preparedness Level: 1

Doug Havlina on Production | [Sign out](#)

Incident: Elko Mahogany Fire - test

[Home](#) [Incidents](#) [Analyses](#) [Intelligence](#) [Data Management](#)[Help](#) | [Feedback](#)[Information](#) [Situation](#) [Objectives](#) [Courses of Action](#) [Validation](#) [Decisions](#) [Periodic Assessment](#) [Reports](#)[Menu](#) [Map](#) [Info](#)

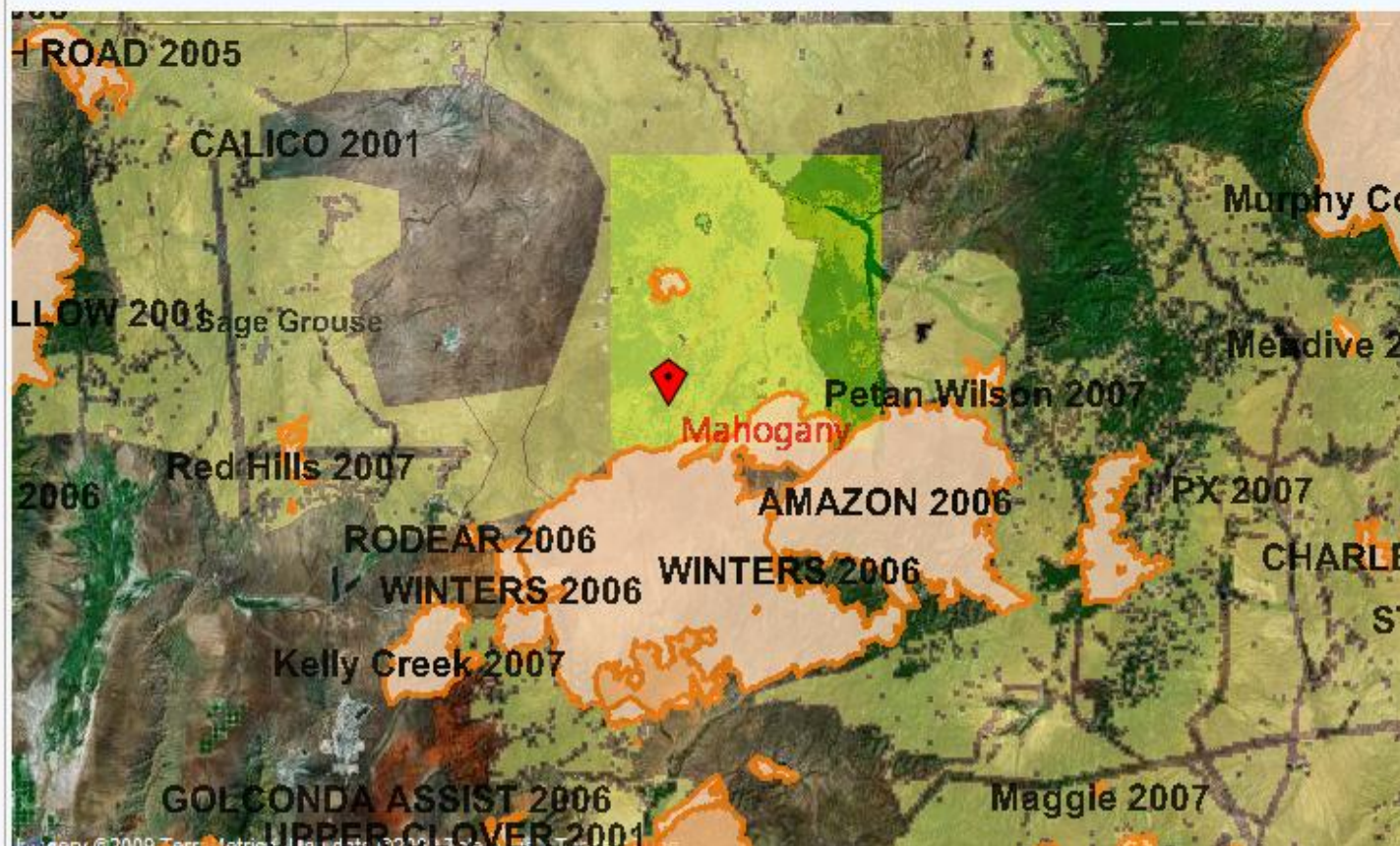
Scale = 1 : 865K



Latitude: 41.77336 Longitude: -115.61737

## Layers

- ☒ Base Layers
  - ☐ WFDSS Topos
  - ☒ Google Maps
  - ☐ Google Physical
  - ☐ TerraServer Topos
- ☒ Incident
  - ☒ Fire Perimeters
    - ☒ Mahogany
  - ☐ Fire Barriers
  - ☐ Landscape Masks
  - ☐ Points of Interest
  - ☒ Extent
- ☒ Analyses
  - ☒ Basic
    - ☒ Mahogany Fire
      - ☒ Flame Length
      - ☐ Fireline Intensity
      - ☐ Heat per Unit Area
      - ☐ Crown Fire Activity
      - ☐ Solar Radiation
      - ☐ 1 Hour Fuel Moisture
      - ☐ 10 Hour Fuel Moisture
  - ☐ Short Term





## Strategic Directions Selection

## Active Status

- ☒ All  
☐ Currently Active  
☐ Never Active

☐ Active on

## Next Decision

- ☒ No Filter  
☐ Included  
☐ Excluded  
☐ Included or Excluded

Apply Filter






## Strategic Directions For Elko Mahogany Fire - Test

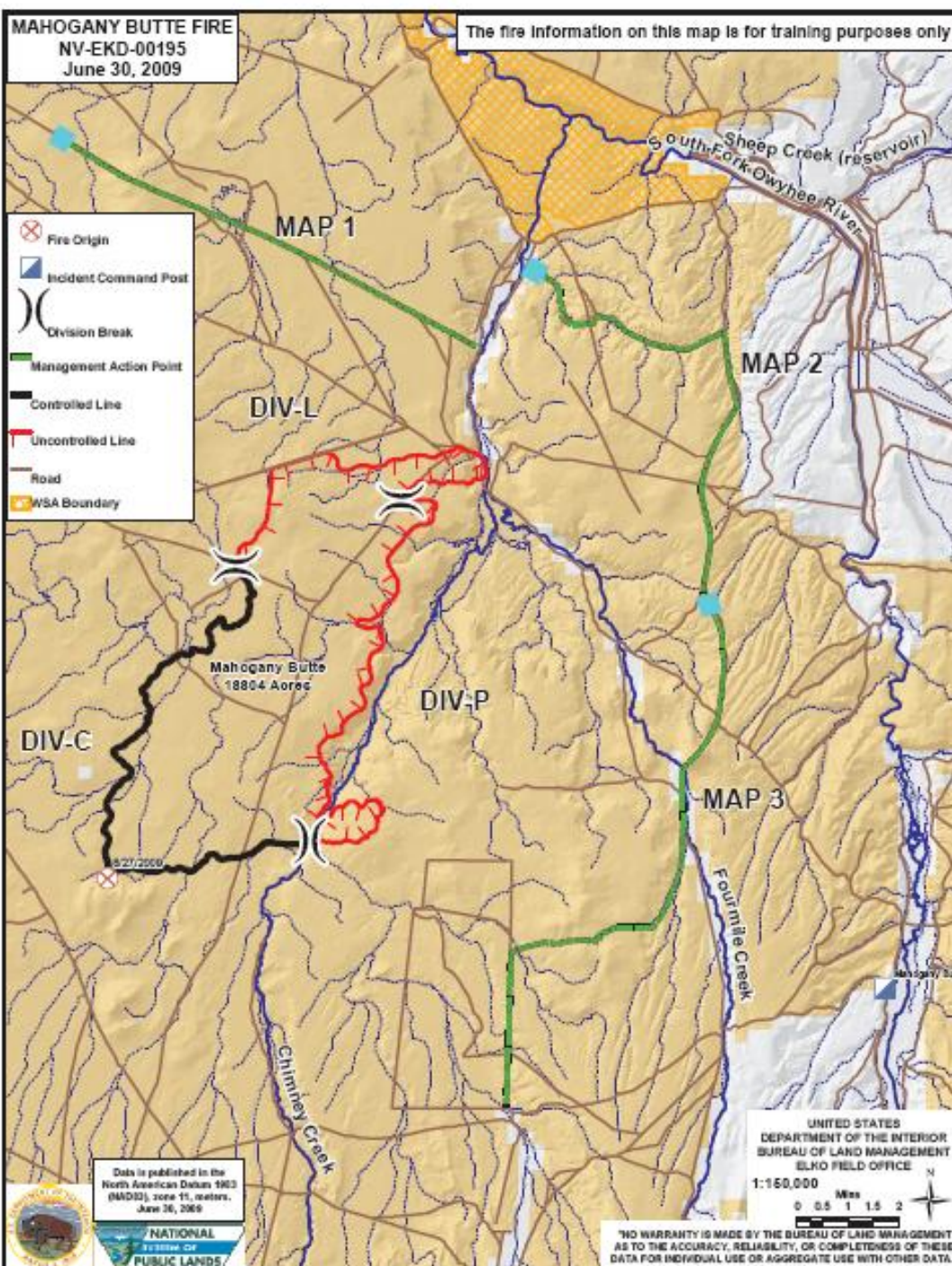
## Create Strategic Direction

Activated	Deactivated	Included	Description
<input type="radio"/>		Yes	<p>STRATEGIC DIRECTION from Elko Interagency FMP and Elko Resource Management Plans:</p> <ol style="list-style-type: none"><li>1. Minimize impacts to sage-steppe ecosystems; protect Sage Grouse habitat.</li><li>2. Protect high value habitat, minimize ground disturbances in exotic plant areas, and protect cultural resource values.</li><li>3. For fires occurring within or adjacent to mine facilities, cultural sites, or those that threaten a WSA, a resource advisor will be on the fire.</li><li>4. In addition to a Resource Advisor, a Public Information Officer and Law Enforcement Officer may be desired on site, especially when fires are in close proximity to private lands (homes and improvements)</li><li>5. Manage the incident safely, and manage incident cost in accordance with values to be protected.</li></ol>
<input type="radio"/>		Yes	<p>Mgmt Requirements and BMPs:</p> <ol style="list-style-type: none"><li>1. Minimize impacts to sage-steppe ecosystem, and protect Sage Grouse habitat.</li><li>2. Consider social, economic, and political constraints when formulating operational plans. Involve local ranchers, NDF, the Resource Advisor, and the assigned IMT Liason in briefings and planning sessions.</li><li>3. Protect high value habitat, minimize impacts to areas of exotic vegetation invasions, and protect cultural values.</li><li>4. For fires occurring within or adjacent to mine facilities, cultural sites, and when fires are within or threaten a WSA, a Resource Advisor is required to be ordered for the fire.</li><li>5. In addition to a Resource Advisor, a Public Information Officer and Law Enforcement Office may be desired on site, especially when fires are in close proximity to private lands (homes and improvements).</li><li>6. Manage the incident safely, and manage incident cost in accordance with values to be protected.</li></ol>
<input type="radio"/>		No	<p>COURSE OF ACTION for Mahogany Fire:</p> <p><b>Organization:</b> Continue existing Type 3 incident command struction, and utilize incoming resources on fire on 7/2 at 0600. Resources arriving from Elko evening of 7/1 include 8 type 4 engines, 2 dozers, 3 type 2 crews, 2 TFLD, and 2 DIVS.</p> <p><b>Control Actions:</b> Continue direct attack with dozers and engines along north and east flanks of incident. Elko helitack to support with bucket drops.</p> <p>DIVISION L: check fire spread south of MAP segment 1.</p> <p>DIVISION P: attempt to check fire spread west of fourmile creek, and keep fire from reaching map segment 3.</p> <p>DIVISION C: continue mop-up and cold trailing. Be available for support to other divisions or IA.</p>

MAHOGANY BUTTE FIRE  
NV-EKD-00195  
June 30, 2009

The fire information on this map is for training purposes only

-  Fire Origin
-  Incident Command Post
-  Division Break
-  Management Action Point
-  Controlled Line
-  Uncontrolled Line
-  Road
-  WSA Boundary



# Additional Functions



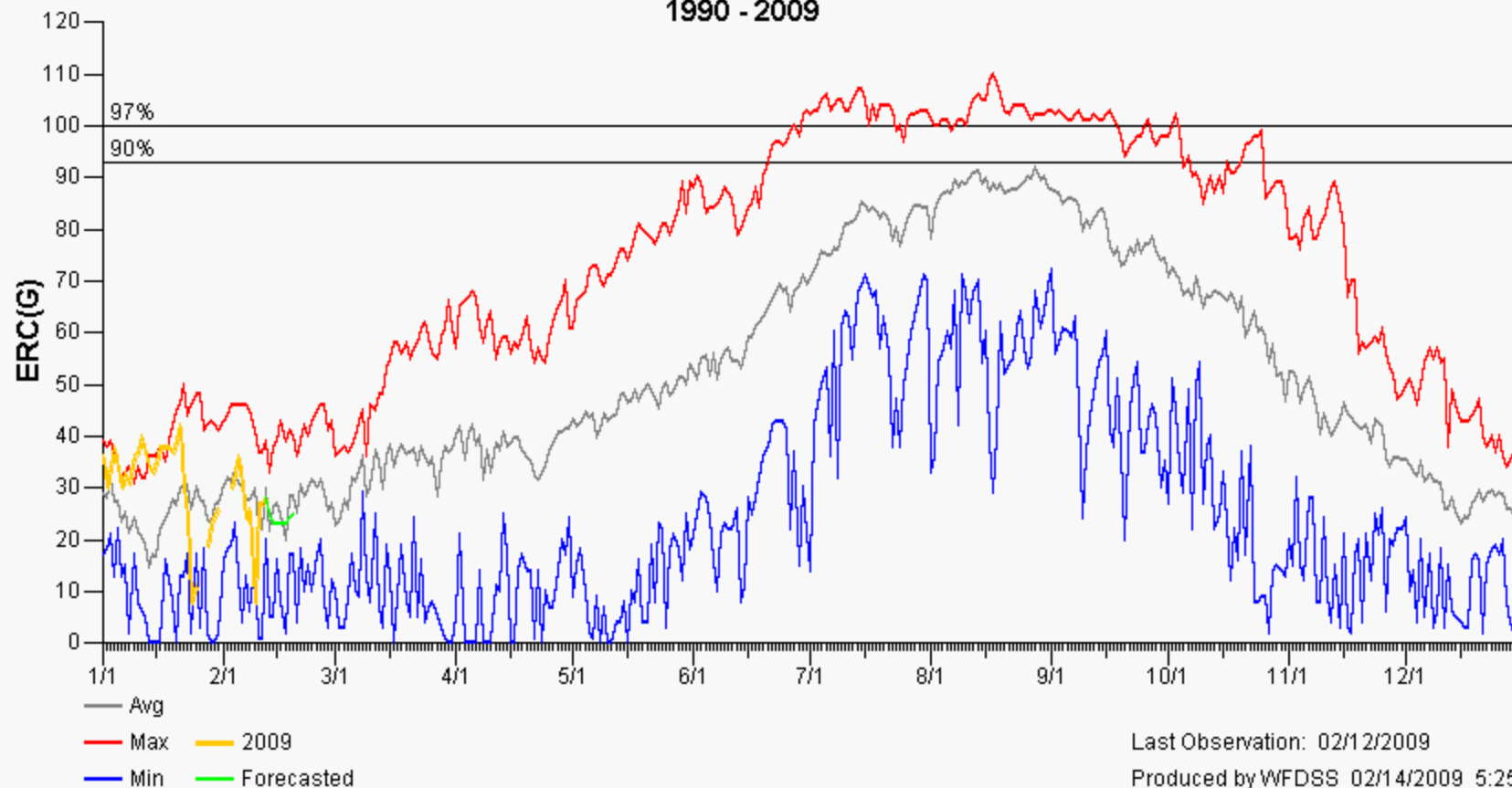
Wildland Fire  
Decision Support System

	Latitude	Longitude	Elevation
Point	41.6116	116.69780 W	1,639 meters
Station	41.68400	116.76400 W	1,664 meters

The distance between the point and station is 6.1 miles

## ERC Graph

### Fire Danger: 260310 - ANTELOPE LAKE 1990 - 2009



# Additional Functions



Wildland Fire  
Decision Support System

000

FNUS55 KLKN 141449

FWFLKN

FIRE WEATHER PLANNING FORECAST FOR NORTHERN AND CENTRAL NEVADA  
NATIONAL WEATHER SERVICE ELKO NV -- OFF-SEASON FORMAT  
316 AM PST SAT FEB 14 2009

NVZ452-151400-

ELKO COUNTY PLUS LANDER AND EUREKA COUNTIES NORTH OF I-80-  
INCLUDING THE CITIES OF...ELKO...SPRING CREEK...CARLIN...WELLS  
316 AM PST SAT FEB 14 2009

.TODAY...MOSTLY CLOUDY. SCATTERED SNOW SHOWERS. HIGHS 30 TO 37.  
SOUTHWEST WINDS 10 TO 15 MPH.

.TONIGHT...MOSTLY CLOUDY. LOWS 5 TO 12. SOUTH WINDS AROUND  
10 MPH.

.SUNDAY...MOSTLY CLOUDY. HIGHS 33 TO 40. SOUTH WINDS 10 TO  
15 MPH.

.SUNDAY NIGHT...MOSTLY CLOUDY. LOWS 12 TO 18. SOUTHEAST WINDS  
AROUND 10 MPH.

.PRESIDENTS DAY...CLOUDY. SLIGHT CHANCE OF SNOW SHOWERS. HIGHS  
34 TO 41. SOUTHEAST WINDS AROUND 10 MPH.

.MONDAY NIGHT...CLOUDY. CHANCE OF SNOW. LOWS 18 TO 24.

.TUESDAY...MOSTLY CLOUDY. CHANCE OF SNOW. HIGHS 34 TO 40.

.TUESDAY NIGHT...MOSTLY CLOUDY. SLIGHT CHANCE OF SNOW. LOWS 13 TO  
19.

.WEDNESDAY...MOSTLY CLOUDY. SLIGHT CHANCE OF SNOW. HIGHS 33 TO  
40.

.WEDNESDAY NIGHT...MOSTLY CLOUDY. LOWS 6 TO 13.

.THURSDAY...PARTLY CLOUDY. HIGHS 34 TO 41.

.THURSDAY NIGHT...PARTLY CLOUDY. LOWS 9 TO 19.

.FRIDAY...PARTLY CLOUDY. HIGHS 39 TO 46.

\$\$

# RAVAR Report

## Values Inventory Information

Latitude 41.5993 Longitude 116.6974 W Radius 5.0 miles

Asset	Value	Data Source	Currency	Coverage
Census Housing Values	\$0	U.S. Census Bureau	Jan 01, 2000	National coverage
Habitat: Sage Grouse	43,614 acres	BLM	Jul 15, 2008	National coverage
Jurisdiction: Private	40 acres	Various		AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY
Jurisdiction: BLM	50,225 acres	Various		AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY

Susan Goodman of the NOC is leading effort to compile state spatial data and build into WFDSS





# Outreach of the WFDSS

- **Near Term**

- a. Alpha-testing; more repetition
- b. Feedback form for users in 2009
- c. FAQs in development
- d. Mock up examples in development
- e. Info sharing by your state contact on oversight group
- f. WFDSS website at BLM FAM webpage

- **Long-term**

- a. LANDFIRE refresh (end of 2010)
- b. Training resources
- c. Susan Goodman coordinating spatial data



# WFDSS State Contacts

State Contacts for WFDSS	Emphasis Area
Dave Jandt, Zone FMO, Fairbanks AK	Alaska Point of Contact
Mark Pater, Fire Ecologist, Safford AZ	Arizona Point of Contact
James Newman, State Fire Planner	California Point of Contact
Gwenan Poirier, State Fire Planner	Colorado and Wyoming Point of Contact

Total of 24 BLM employees making up the oversight group

Santa Fe NM	
Rex McKnight, State FMO, Reno NV	Nevada Point of Contact
Louisa Evers, Fire Ecologist, Portland OR	Oregon Point of Contact
Brad Washa, State Fuels Lead, Salt Lake City UT	Utah Point of Contact



# Actions Needed for WFDSS Implementation

- Spatial data submission (Susan Goodman of NOC is coordinating)
- RMP and FMP objectives need to be built into the WFDSS (Data Manager role in WFDSS)
- BLM's WFDSS Oversight group will provide outreach, guidance, and awareness (know your state lead)
- A specific BLM WFDSS website to be up soon (<http://web.blm.gov/internal/fire/FEM/wfdss.htm>) with IM, FAQs, and other resources